

[Designation of Document] Claims

[Claim 1] A method for measuring a dielectric constant, comprising: irradiating a sample with light; measuring light that has transmitted through or reflected on the sample; and determining a complex dielectric constant of the sample depending upon a spectrum of the transmitted or reflected light.

[Claim 2] A method according to claim 1, wherein a complex dielectric constant of the sample is determined by setting an incident angle of the incident light upon the sample at 60 degrees or greater and smaller than 90 degrees.

[Claim 3] A method according to claim 1 or 2, wherein the sample is a substrate having a uniform dielectric constant and uniform thickness or a sample having a thin film provided on a part of the substrate.

[Claim 4] A method according to any of claims 1 to 3, wherein the irradiation light is S-polarized light.

[Claim 5] A method according to any of claims 1 to 4, wherein the irradiation light has a wavelength in a region of a millimeter wave, a sub-millimeter wave or tera-hertz of light.

[Claim 6] An apparatus for measuring a dielectric constant, which measures a dielectric constant of a sample by irradiating the sample with light; measuring light that has transmitted through or reflected upon the sample; and determining a complex dielectric constant of the sample depending upon a spectrum

of the transmitted or reflected light.

[Claim 7] An apparatus according to claim 6, wherein incident light upon the sample is changeable in the position, and a photodetector for receiving the transmitted or reflected light is also changeable in the position.

[Claim 8] An apparatus according to claim 6 or 7, wherein incident light upon the sample is changeable in incident angle.